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(71) Applicant: **NATIONAL INSTITUTE OF
ADVANCED INDUSTRIAL &
TECHNOLOGY**

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(54) OPTICAL ELEMENT AND METHOD FOR MANUFACTURING THE SAME

(57) Abstract:

PROBLEM TO BE SOLVED: To provide a very inexpensive and highly efficient nonlinear optical element which is operable in a communication wavelength region by applying single wall carbon nanotubes to the optical element, and to provide a method for manufacturing the optical element.

SOLUTION: The optical element has a thin film consisting of the laminated single wall carbon nanotubes and utilizes its saturable absorbing function. The optical element is manufactured by preparing a dispersion liquid by dispersing the single wall carbon nanotubes in a dispersion medium and forming the thin film by spray-coating a material to be coated with the dispersion liquid.

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TOKUMOTO MADOKA;
TATSUURA SATOSHI;
ACHINAMI HIROTSUGU;
KATAURA HIROMICHI;**Assignee:** NATIONAL INSTITUTE OF ADVANCED INDUSTRIAL & TECHNOLOGY

FUJI XEROX CO LTD

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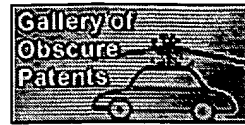
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